

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference PCT2005-01	<b>FOR FURTHER ACTION</b>	See item 4 below
International application No. PCT/JP2005/003850	International filing date ( <i>day/month/year</i> ) 07 March 2005 (07.03.2005)	Priority date ( <i>day/month/year</i> ) 08 March 2004 (08.03.2004)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant NIPPON SUISAN KAISHA, LTD.		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- |                                     |              |                                                                                                                                                                 |
|-------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the report                                                                                                                                             |
| <input type="checkbox"/>            | Box No. II   | Priority                                                                                                                                                        |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability                                                                |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention                                                                                                                                      |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited                                                                                                                                         |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application                                                                                                                |
| <input type="checkbox"/>            | Box No. VIII | Certain observations on the international application                                                                                                           |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Date of issuance of this report 29 November 2006 (29.11.2006)
Facsimile No. +41 22 338 82 70	Authorized officer <div style="text-align: center; font-weight: bold; margin: 10px 0;">Masashi Honda</div> e-mail: pt08@wipo.int

# PATENT COOPERATION TREATY

TRANSLATION

From the  
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing  
(day/month/year)

Applicant's or agent's file reference

**PCT2005-01**

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.

**PCT/JP2005/003850**

International filing date (day/month/year)

**07.03.2005**

Priority date (day/month/year)

**08.03.2004**

International Patent Classification (IPC) or both national classification and IPC

Applicant

**NIPPON SUISAN KAISHA, LTD.**

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/003850

Box No. I

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐

This opinion has been established on the basis of a translation from the original language into the following language

\_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐

a sequence listing

☐

table(s) related to the sequence listing

b. format of material

☐

in written format

☐

in computer readable form

c. time of filing/furnishing

☐

contained in the international application as filed.

☐

filed together with the international application in computer readable form.

☐

furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/JP2005/003850

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims <u>3-7, 10-11</u>	YES
	Claims <u>1, 2, 8, 9, 12</u>	NO
Inventive step (IS)	Claims _____	YES
	Claims <u>1-12</u>	NO
Industrial applicability (IA)	Claims <u>1-12</u>	YES
	Claims _____	NO

**2. Citations and explanations:**

Document 1: JP, 56-48129, B (Director General of National Food Research Institute, Ministry of Agriculture, Forestry and Fisheries), 13 November, 1981 (13.11.81)  
 Document 2: JP, 2000-166516, A (Yukitoshi TAGUCHI), 20 June, 2000 (20.06.00)  
 Document 3: "Plankton Gyogyo", (Ichiro MIYAZAKI), 15 October, 1978 (15.10.78), Shoku no Kagaku, Vol. 44, pages 91-103  
 Document 4: "Okiami", (Toyosuke IMAKI), 15 April, 1973 (15.04.73), Shoku no Kagaku, Vol. 11, pages 74-86  
 Document 5: (Toru HIDAKA, et al.), 1 October, 2001 (01.10.01), Shokuhin Tenkabutsu Jiten, Kabushiki Kaisha Shokuhin Kagaku Shinbunsha, page 56

**Claims 1-12**

Document 1 describes the constitution in which an euphausiacean is dried and vibrated on a sieve, whereby eyeballs are removed from the euphausiacean. Furthermore, the isolated part (the removed part) includes an eyeball concentrate and is considered to be a kind of aggregate of the eyeballs.

Moreover, since (1) the eyeballs of the euphausiacean contain a high content of astaxanthins as disclosed in documents 3 and 4, and (2) it is well-known that euphausiacean pigment (carotenoid-based pigment such as astaxanthins) is extracted from the eyes as disclosed in document 5, a person skilled in the art could have easily conceived of obtaining lipids such as carotenoids from the eyeballs of the euphausiacean described in document 1.

In addition, a person skilled in the art could have, as required, selected a suitable drying degree when the eyeballs are isolated.

**Claims 1, 8 and 9**

Document 2 describes the constitution in which eyeballs are removed from a shrimp by drying the shrimp and blowing air thereon (physical impact). Furthermore, the isolated part (the removed part) includes an eyeball concentrate and is considered to be a kind of aggregate of the eyeballs.